AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning on page 1, line 16 with the following amended paragraph:

According to the present invention, a first aspect of the present invention provides a first semiconductor device comprising: a circuit substrate and a semiconductor substrate fixed with respect to the circuit substrate; said semiconductor substrate including a ~~fix~~ fixed portion and a movable portion, said ~~fix~~ fixed portion being fixed with respect to said circuit substrate, said movable portion being movable in a predetermined direction with respect to said ~~fix~~ fixed portion, said ~~fix~~ fixed portion being electrically insulated and including ~~with electrical insulation~~: an input electrode for inputting a periodical signal from said circuit substrate to said movable portion to vibrate said movable portion; and an output electrode for outputting a signal indicative of capacitive variation based on vibration of said movable portion in said predetermined direction toward said circuit substrate; an input wire for connecting said input electrode to said circuit substrate; an output wire for connecting said output electrode to said circuit substrate; and a shield wire connected to a constant potential at said circuit substrate to provide capacitive shielding between said input wire and said output wire.

Please replace the paragraph beginning on page 2, line 20, with the following amended paragraph:

According to the present invention, a fifth aspect of the present invention provides a semiconductor device based on the first aspect, wherein said ~~fix~~ fixed portion further

includes ~~with~~ electrical insulation, a dummy electrode capacitively coupled to said input electrode near said output electrode for generating a dummy signal and said semiconductor device further comprises a dummy signal wire connected to said dummy electrode and said circuit substrate, said dummy signal including a component of said periodical signal induced and being supplied to said circuit substrate ~~to be used~~ to cancel another component of said periodical signal induced in said signal.

ok Please replace the paragraph beginning on page 3, line 5, with the following amended paragraph:

According to the present invention, a sixth aspect of the present invention provides a semiconductor device based on the first aspect, wherein said movable portion is movable in another predetermined direction with respect to said ~~fix~~ fixed portion, said semiconductor device further comprising angular velocity detection means for detecting vibration of said movable portion in said another direction to determine an angular velocity around an axis perpendicular to said predetermined direction and another predetermined direction to generate said detection signal.

ok Please replace the paragraph beginning on page 3, line 14, with the following amended paragraph:

According to the present invention, a seventh aspect of the present invention provides a semiconductor device comprising: a circuit substrate and a semiconductor

substrate fixed with respect to the circuit substrate; said semiconductor substrate including a ~~fix~~ fixed portion and a movable portion, said ~~fix~~ fixed portion being fixed with respect to said circuit substrate, said movable portion being movable in a predetermined direction with respect to said ~~fix~~ fixed portion, said ~~fix~~ fixed portion being electrically insulated and including ~~with electrical insulation~~: an input electrode for inputting a periodical signal from said circuit substrate to said movable portion to vibrate said movable portion; an output electrode for outputting a signal indicative of capacitive variation based on vibration of said movable portion in said predetermined direction toward said circuit substrate; ~~and~~ a monitor electrode for monitoring capacitive variation based on vibration of said movable portion in said first predetermined direction and supplying a monitor signal to said circuit substrate; an input wire for connecting said input electrode to said circuit substrate; an output wire for connecting said output electrode to said circuit substrate; and a monitor wire for connecting said monitor electrode to said circuit substrate; and a shield wire connected to a constant potential at said circuit substrate to provide capacitive shielding between said input wire and said output wire and between said input wire and said monitor wire.

OK

Please replace the paragraph beginning on page 5, line 1, with the following amended paragraph:

According to the present invention, a twelfth aspect of the present invention provides a semiconductor device based on the seventh aspect, wherein said ~~fix~~ fixed portion further includes ~~with~~ electrical insulation, a dummy electrode capacitively coupled to said input electrode near said output electrode for generating a dummy signal,

and said semiconductor device further comprises a dummy signal wire connected to said dummy electrode and said circuit substrate, said dummy signal including a component of said periodical signal induced and being supplied to said circuit substrate ~~to be used~~ to cancel another component of said periodical signal induced in said signal.

Please replace the paragraph beginning on page 5, line 12, with the following amended paragraph:

According to the present invention, a thirteenth aspect of the present invention provides a semiconductor device comprising: a circuit substrate and a semiconductor substrate fixed with respect to the circuit substrate; said semiconductor substrate including a ~~fix~~ fixed portion and a movable portion, said ~~fix~~ fixed portion being fixed with respect to said circuit substrate and having supporting means for supporting said movable portion with movement in a predetermined direction with respect to said ~~fix~~ fixed portion, said movable portion being electrically connected to a predetermined potential; capacitive driving means for driving said movable portion, said capacitive driving means including a drive electrode included in said ~~fix~~ fixed portion for inputting a drive signal from said circuit substrate to said movable portion to vibrate said movable portion; detection means for detecting capacitive variation based on vibration of said movable portion caused by supplying said drive signal to said movable portion, said detection means including a detection electrode included in said ~~fix~~ fixed portion to supply a detection signal to said circuit substrate; and a shield wire pad arranged between said drive electrode and said signal electrode which is neighbor to said one of said drive electrodes; a drive signal wire for connecting said drive electrode to said circuit substrate;

a detection wire for connecting said signal electrode to said circuit substrate; and a shield wire connected to said shield wire pad and a constant potential at said circuit substrate to provide capacitive shielding between said drive wires and said detection wire.

Please replace the paragraph beginning on page 6, line 17, with the following amended paragraph:

Fig. 2 is a sectional side elevation view of the semiconductor device taken on line A-A in Figs. 1 and 4;

Please replace the paragraphs beginning on page 6, line 21, with the following amended paragraph:

Fig. 4 is a plan view of the proto-type of the semiconductor device according to ~~this~~ the present invention.

Fig. 5 is a schematic circuit diagram of a partial signal circuit for the angular velocity sensor according to the ~~embodiment~~ semiconductor device of the present invention.

Please replace the paragraph beginning on page 7, line 15, with the following amended paragraph:

The first silicon substrate 11 and the oxide film 13 are partially removed to have an opening 14 at the middle of the first silicon substrate 11 without removal of the second silicon substrate 12. Moreover, the first silicon substrate 11 is fixed to a circuit substrate K1 having a ~~signal~~ processing circuit.

Please replace the paragraph beginning on page 7, line 23, with the following amended paragraph:

A movable portion 30 is formed to have a substantially rectangular plate shape above the opening 14 by forming grooves surrounding it ~~expect~~ except elastically connecting portions, i.e., driving beams 33 and detection beams 34. That is, the movable portion 30 is formed inside the frame 20.

Please replace the paragraph beginning on page 8, line 15, with the following amended paragraph:

On edges of the opening 14 extending a longitudinal direction of the movable portion 30, drive (input) electrodes 40 having teeth are formed to supply driving signals to provide vibration of the movable portion 30 in the x direction. A portion thereof is formed on ~~the~~ an oxide film ~~14~~ such as the oxide film 13 shown in Figs. 2 and 3, and the teeth 35 facing with the teeth ~~34~~ of drive electrodes 40 are formed at the edge of the movable portion 30 such that the teeth of the drive electrodes 40 interlace with the teeth 34.

Please replace the paragraph beginning on page 10, line 21, with the following amended paragraph:

The semiconductor device shown in Fig. 1 has substantially the same structure as one shown in Fig. 4. That is, the first substrate 11 is supported by the circuit substrate K1. The first substrate 11 has the opening 14. The second substrates 12 and the

electrodes are supported by the first substrate 11 through the oxide film 13. The movable portion is supported above the opening 14 by the drive beams 33. The difference is that shield wires 70 and shield pads 71, and dummy electrodes 80 and dummy signal wires 82 are further provided.

Please replace the paragraph beginning on page 12, line 1, with the following amended paragraph:

OK

The shield wires 70 connected to the shield pads 71 are grounded on the circuit substrate K1, that is, the shield ~~electrode~~ pad 71 and the shield wire 70 are maintained at a constant potential to reduce capacitive coupling. The shield pad 71 is arranged between the drive electrode 40 and the detection electrode 50 and between the drive electrode 40 and the monitor electrode 60. Similarly, the shield wire 70 is arranged between the drive wire 42 and the detection wire 52 and between the drive wire 42 and the monitor wire 62.

Please replace the paragraph beginning on page 13, line 22, with the following amended paragraph:

Actually, there are electric lines of force jumping over the shield wires 70 ~~in~~ to some degree, so that it is not possible to perfectly suppress the stray capacitance. However, this structure provides a considerable improvement. More specifically, in the example shown in Fig. 4, the stray capacitance between the drive wire 42 and the detection wires 52 is ~~considerable improvement~~ considerably reduced. More specifically, in the example shown in Fig. 4, the stray capacitance between the drive wire 42 and the detection wire 52 without the shield wire 70 was 0.27 fF. On the other hand, in the

structure shown in Fig. 1, the stray capacitance between the drive wire 42 and the detection wire 52 is reduced to a half of this value, more specifically, 0.15 fF. Therefore, the shield wires 70 can reduce the capacitive coupling between the drive wire 42 and the detection wires 52.

Please replace the paragraph beginning on page 14, line 23, with the following amended paragraph:

The drive electrode 40 and the detection electrode 50 are arranged at locations corresponding to different sides of the rectangular plate shape, respectively. Similarly, the drive electrode 40 and the monitor electrode ~~50~~ 60 are arranged at locations corresponding to different sides of said rectangular plate, respectively. In this structure, the drive electrode 40 is distantly located from the detection electrode 50 and the monitor electrode 60.

Please replace the paragraph beginning on page 16, line 14, with the following amended paragraph:

To reduce this ~~affection~~ effect, dummy electrodes 80 are formed on the oxide film 13 at the edge of the opening 14 near the detection electrodes 50 and the monitor electrodes 60 by providing grooves around them. The dummy electrodes 80 also have pads 81 formed with aluminum which are electrically connected to the circuit substrate K1 with wires 82.

Please replace the paragraph beginning on page 16, line 20, with the following amended paragraph:

The dummy electrode 80 is also capacitively coupled to the drive electrode 40 similarly, wherein the capacitance ~~of the starry capacitance~~ between the drive electrode 40 and the detection electrode 50 (monitor electrode 60) is substantially equal to that between the drive electrode 50 and the dummy electrode 80. This is because the area of the dummy electrode 80 is equalized to that of the drive electrode 40, and the thickness of the oxide film 13 is even. Accordingly, the driving signal induced component at the dummy electrode 80 is substantially equal to that at the detection electrode 50 or the monitor electrode 60. Then, the driving signal induced component at the dummy electrode 80 is used for canceling the drive signal induced component in the detection signal and the monitor signal.

Please replace the abstract with the following amended abstract:

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A semiconductor device includes ~~Grooves are~~ grooves formed in a semiconductor substrate to provide a an inner portion movable in x and y directions~~;~~. ~~drive~~ Drive electrodes ~~to vibrates~~ vibrate the inner portion in the x direction, and detection ~~electrode~~ electrodes ~~for detecting~~ detect movement in the y direction ~~which is~~ generated when an angular velocity is applied thereto~~;~~ . ~~monitor~~ Monitor electrodes ~~for generating~~ generate monitor signals for monitoring ~~the~~ movement of the inner portion in the x direction. Shield wires are provided between the drive ~~electrodes~~ and ~~the~~ detection electrodes and the monitor electrodes to suppress ~~the~~ capacitive coupling. Dummy electrodes adjacent to the output electrodes and capacitively coupled to the drive electrodes generate a dummy signal. Dummy signal wires are respectively connected to the dummy electrodes to the circuit substrate. The dummy signal includes an induced component of a periodical signal and is supplied to the circuit substrate to cancel another induced component of the periodical signal in the drive and monitor signals.